

Community Services and Operations Committee
Comité des services communautaires et des opérations

Agenda 7
Ordre du jour 7

Wednesday, April 12, 2000 - 9:15 a.m.
Le mercredi 12 avril 2000 - 9 h 15

Victoria Hall, First Level
Bytown Pavilion, City Hall

Salle Victoria, niveau 1
Pavillon Bytown, hôtel de ville

**Confirmation of Minutes
Ratification des procès-verbaux**

Minutes 6 (March 29, 2000)

Procès-verbal 6 (Le 29 mars 2000)

Index

Information Items

Articles pour information

- | | | |
|----|---|---|
| 1. | City of Ottawa Community Greenhouse Gas Reduction Action Plan:
Third Annual Progress Report
Plan d'action communautaire de la Ville d'Ottawa pour la réduction
des émissions de gaz à effet de serre : troisième rapport d'étape annuel
Ref.: ACS2000-PW-ENV-0001 | 1 |
| | City Wide | |

Action Items

Articles pour exécution

- | | | |
|----|---|----|
| 2. | Hiring of Dump Trucks
Louage de Camions à Benne
Ref.: ACS2000-PW-ASM-0001 | 21 |
| | City Wide | |

Regional Matters Questions régionales

Members' Reports - Enquiries Rapports des membres - demandes de renseignements

Councillor/Conseiller Stéphane Émard-Chabot, Chairperson/Président

Councillor/Conseillère Inez Berg, Vice-Chairperson/Vice-présidente

Councillor/Conseillère Elisabeth Arnold

Councillor/Conseillère Diane Deans

Councillor/Conseiller Allan Higdon

Councillor/Conseiller Shawn Little

LZF

March 30, 2000

ACS2000-PW-ENV-0001
(File: NEC3200/0110)

Department of Urban Planning and Public
Works

Ward/Quartier
City Wide

- Community Services and Operations
Committee / Comité des services
communautaires et des opérations
- City Council / Conseil municipal

Information

1. City of Ottawa Community Greenhouse Gas Reduction Action Plan: Third Annual Progress Report

Plan d'action communautaire de la Ville d'Ottawa pour la réduction des émissions de gaz à effet de serre : troisième rapport d'étape annuel

Information

1.0 Introduction

In August 1992, to fulfill its commitment as a member of the Partners for Climate Protection (PCP) program (formerly the 20% Club), Ottawa City Council passed a resolution committing to a twenty percent reduction of greenhouse gas (GHG) emissions from 1990 levels by the year 2005. The City then created the Task Force on the Atmosphere in order to help the City and its citizens determine how to achieve the 20% emission reduction target. In October of 1995 the Task Force submitted *Opportunities for Energy Efficiency: A Call to Action- The City of Ottawa's Task Force on the Atmosphere Action Plan*.

The Task Force on the Atmosphere Action Plan defined 11 separate elements, each of which became a project designed to reduce greenhouse gas emissions in the community. Each element addressed the major contributors to greenhouse gas emissions in the City of Ottawa including the residential, commercial and transportation sectors. In accordance with City policy, upon issuing its final report, the Task Force on the Atmosphere was dissolved and an Implementation Strategy was initiated. The Implementation Strategy created three separate entities, namely:

1. *An Advisory Committee*: established to lead the Implementation Strategy, to oversee activities, and to monitor and adjust the Action Plan as needed.
2. *An Implementation Team*: consisting of City of Ottawa staff, the Implementation Team's responsibilities are to act as a technical resource and assist with the development and implementation of each Action Plan element. Once implementation occurs, the team

is responsible for overseeing the day-to-day operations of these programs.

3. *Individual Action Plan Work Groups*: comprised of partner organisations who helped create the Action Plan or who are interested in seeing particular Action Plan elements implemented.

1.1 Objective

This report is intended to:

- report on GHG emissions trends within the City of Ottawa in 1998 and assess progress towards the 20% reduction target;
- review the status and progress of Action Plan programs identified in previous reports;
- identify priority Action Plan strategies for 2000, including recommendations on how to proceed with the Community Action Plan in the new City of Ottawa.

1.2 Background

In 1999, the United Nations identified global climate change as the most important environmental issue of the 21st century. Scientists in Canada predict a 3° - 8° C increase in temperature, a 50% increase in severe weather disruptions (droughts, storms), and a 20cm - 50cm rise in sea level as a result of climate change in the next 100 years.

The economic impacts of climate change are substantive. Poor harvests, an increasing number of forest fires and a loss of fish habitat are already occurring in Canada's primary industries. Other sectors of the economy are also feeling the effects of climate change: within 15 years there has been a 30-fold increase in Canada's weather-related insurance claims, up from \$39 million in 1984 to \$1.45 billion in 1998.

Following Canada's 1997 commitment to climate change action in Kyoto, Japan, the federal government began an exhaustive analysis of the effects of climate change and an identification of mitigating measures across all sectors of the Canadian economy. The National Implementation Strategy for Climate Change will be completed by the end of 2000. In the interim, the February 2000 federal budget has pledged \$700 million between 2000 and 2003 to maintain momentum towards achieving Canada's climate change objectives.

Municipal environmental initiatives which promote building retrofits, water conservation, renewable energy and enhanced urban transit and waste management will be able to access new federal funding through the Federation of Canadian Municipalities. The Green Municipal Enabling Fund provides \$25 million to help municipalities determine the feasibility of environmental projects while the Green Municipal Investment Fund is a \$100 million revolving loan fund to support environmental projects. Environmental programs identified in this report are examples of the type of projects that would be encouraged by these new

federal programs.

The City of Ottawa is considered a leader in municipal climate change action and was one of the first cities in Canada to adopt a climate change commitment. Since 1992, over 60 Canadian municipalities have adopted climate change commitments and have become members of the PCP program. The City of Ottawa remains a leader as one of only six local governments in Canada to have developed and implemented a Community Climate Change Action Plan.

1.3 Update: City of Ottawa Task Force on the Atmosphere Implementation Team

1998 was a year of transition for the City of Ottawa's climate change program. Both staff members responsible for the development and implementation of the City's Corporate and Community Action Plans had left the corporation by August, 1998. These positions remained vacant until May, 1999 when the climate change program was re-activated. Since May, 1999 three new climate change team members have been re-evaluating existing climate change programs and establishing new initiatives.

A first priority of the new team was to ensure the active implementation of the City's own corporate GHG emission reduction strategy and to monitor the City's progress towards achieving its own corporate emissions reduction goal. This was deemed an essential first step, since the City is in a much better position to lead community-wide initiatives with its own house in order. While GHG emission reductions have been the key objective of the City's corporate strategy, long term cost savings through increased energy efficiency have become a substantial ancillary economic benefit.

1.3.1 Selected achievements of the City of Ottawa's Corporate GHG Reduction Strategy include:

- In 1998, the City had achieved a 19% reduction in CO₂ emissions from 1990 levels;
- Ongoing building retrofits have attained an 18% reduction in energy use in City facilities;
- Estimated avoided costs from the use of energy efficient street lighting systems are \$268,000 year in maintenance costs, and \$360,000 year in energy costs;
- Increased efficiency of the City's fleets has resulted in a 13% reduction in energy use and a 21.4% reduction in CO₂ emissions since 1990.

1.3.2 Other Corporate Activities

In recognition of the City's leadership in municipal climate change action, the Region of Ottawa Carleton has contracted with the City's Environmental Management Branch to help develop and implement the Region's corporate and community Climate Change Action Plans.

City and Regional Climate Change staff have recently completed the Region's Corporate Climate Change Action Plan and are now cooperating to implement the Region's corporate strategy. A technical study of building, transportation and landfill gas emissions from across the region is being conducted in the year 2000 with funding from the Region. This study will establish a baseline GHG emission inventory within the existing Region of Ottawa Carleton boundaries and will serve as the baseline emission inventory for the new City of Ottawa.

1.4 Restructuring and the new City of Ottawa Community Climate Change Action Plan

The forthcoming restructuring and amalgamation of the City of Ottawa with adjacent municipalities and the substantial shift in its boundaries and size will require the revision of many elements of the existing Plan. A new greenhouse gas inventory to establish the 1990 baseline emissions for the new city is already in progress. Existing programs will need to be expanded beyond the current City boundaries to include adjacent communities. Districts that were not previously involved in climate change programs and commitments will need to become actively involved in an expanded and renewed climate change program.

With internal programs well established, City staff are poised to reactivate and reevaluate community outreach programs that were created in the Task Force on the Atmosphere Action Plan. The need to review and expand community climate change programs offers the unique opportunity to re-evaluate the direction of the existing Greenhouse Gas Reduction Action Plan and to draw upon lessons learned, in the creation of an enhanced strategy to meet the new community's climate change goals.

2.0 1998 Greenhouse Gas Inventory

It can be very challenging to acquire and analyse the data necessary for annual monitoring of community GHG emissions. The City of Ottawa recognised this issue and in 1997 and 1998 worked with Environment Canada and the consultant group of Torrie Smith Associates to develop a standardised monitoring and reporting tool to facilitate consistent GHG emission reporting. An expanded version of the software tool developed through this partnership is now being used by PCP members across Canada.

The PCP software tool has many benefits that will enhance the monitoring capabilities of PCP members. Emission calculations are simplified and the operator does not require strong technical capabilities to arrive at GHG emissions inventory numbers. In addition, algorithms are embedded in the software which means that PCP cities will be using standardised calculations to arrive at their GHG emissions results, making comparisons between cities more credible.

Table 1: Trends in GHG Emission in the City of Ottawa

Greenhouse Gas Emissions in the City of Ottawa 1990 to 1998 (Tonnes eCO₂)

	1990	1993	1996	1998
Residential	537588	484310	479080	1,573,163*
Commercial	1109844	855284	938650	
Total Commercial/ Residential	1647432	1339594	1417730	1573163
Transportation	846293	855284	839003	853,800* ¹
Methane	457770	429013	386060	375,370* ²
Total Emissions	2951796	2718731	2642793	2802333

* Aggregate of all CO₂ from electricity, natural gas and fuel oil. No breakdown available by sector. See Appendix 1 for details.

*¹ Information from R. Parfett and Associates. GIS-Based Sustainable Urban Planning Tool V1.0.

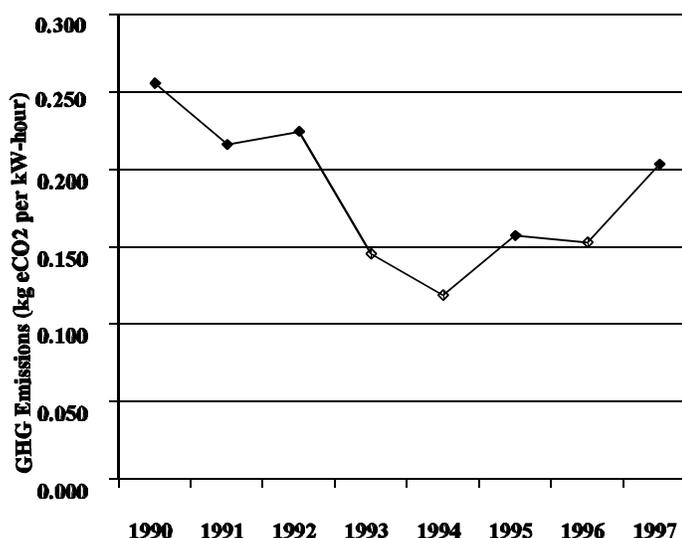
*² Assumption given recent trend- see Appendix 1 for more detail

Table 1 illustrates that 1998 GHG emissions in the City of Ottawa were 5% below 1990 levels. This trend runs counter to national trends which indicate that overall Canadian GHG emissions continue to rise. CO₂ levels in Canada have risen from 461 Mt eCO₂ in 1990 to 520MT eCO₂ in 1997, a 12 % increase¹. The decline in GHG emissions within the City comes despite a population increase of almost 6% since 1990.

The increase in building emissions can be attributed to the increasing GHG intensity of fuel used to create electricity in Ontario. Recently, Ontario Power Generation (formerly Ontario Hydro) has taken some of its nuclear reactors off-line. To compensate, the amount of power generated from fossil fuels, which contain higher volumes of CO₂, has increased. This change in fuel mix has tremendous implications with respect to greenhouse gas reduction targets. Figure 4 illustrates the fluctuating levels of electrical emissions in the province of Ontario since 1990.

**Figure 4: Average Greenhouse Gas Emissions per
Kilowatt-hour of Electricity Use in Ontario
1990 - 1997**

- *Emissions per kWh of electricity declined between 1990 and 1994, but they are on an upward trend.*
- *Emissions per kWh of electricity were lower in 1997 than in 1990. This will result in lower CO₂ emissions in 1997.*
- *Emissions per kWh are anticipated to increase beyond 1990 levels within the next few years.*



Ontario's fluctuating electrical fuel mix affects municipalities engaged in reducing local emissions. For example, in 1996 the City of Ottawa found that an 8% reduction in the City's overall corporate energy use translated into a 29% reduction in CO₂ emissions. In 1998, the City's overall energy use decreased by a further 4% yet because of the higher percentage of fossil fuels used to generate the City's electrical energy, CO₂ emissions actually increased by 3,000 tonnes from 1996 levels. Clearly, measures taken by the City to reduce energy consumption do not necessarily translate to a corresponding reduction in CO₂ emissions.

While municipalities can influence energy efficiency in their facilities and fleets, they have no control over the fuel mix used for power generation. If greenhouse gas emissions are the only baseline by which to judge success, then, depending on the electrical fuel mix, extremely "deep" efficiency programs and retrofits may be required, which simply do not make financial sense. Recent experience demonstrates the need to include the goal of energy efficiency along with greenhouse gas reduction targets. Tracking annual energy use, and per capita energy trends in addition to GHG emissions levels will more clearly illustrate the effectiveness of energy efficiency measures.

The transportation sector has experienced a slight increase in emissions since 1990 possibly due to continued expansion of population growth, particularly suburban growth and a growing trend towards the use of less fuel efficient vehicles such as Sports Utility Vehicles (SUVs) and trucks and vans. Methane emissions resulting from waste to landfill have been declining since 1990. This trend can be attributed to increased waste diversion rates since 1990 which have lowered the amount of waste sent to landfill in the city from approximately

110,000 tonnes in 1990 to 90,000 tonnes in 1998.

In 2000, baseline, current and forecast emissions will be recalculated for the new City of Ottawa using the new PCP software. This will ensure that emissions are calculated using standard methods and assumptions for accurate annual monitoring.

3.0 Report on Programs 1998 and 1999

Table 2 presents the 11 work group elements that were identified in the original Task Force on The Atmosphere Action Plan. Each of these elements was designed to reduce GHG emissions within the community, the first column briefly describes the objectives of each work group. These work groups are broadly classified under three emission sectors: residential, commercial/institutional and transportation. Other categories include the City's climate change program and community awareness, which were initially delegated to the Advisory Committee to supervise. Since the program was reactivated in 1999, the Advisory Committee has not taken part in program planning or direction. Instead, initiatives have been developed through the City's Environmental Management branch and its Implementation Team. New elements developed by the Implementation Team are indicated for each sector.

Table 2 illustrates that in 1998/99 the Implementation Team's interaction with some work groups was inactive, largely due to staff turnover. The last Progress report in 1997 identified the 1998 strategic work plan elements which are listed in the second column. The 1998/99 status of each program is indicated in the third column and a summary of year 2000 program activity is presented in the last column.

Year 2000 programs are discussed in more detail in Section 4.0. In 2000, all members of inactive work groups will be contacted to solicit their input on how to continue to move each program element forward and keep on reducing emissions within the community. A report in the fall will evaluate the lessons learned during the implementation of key action plan elements and identify strategic directions for establishing an expanded action plan for the new City.

Table 2: Task Force on the Atmosphere Action Plan: 1998 Strategic Plan, Status and Year 2000 Direction

Work Group/ Program Area Objectives	1998 Strategic Plan	1998/99 Progress	Year 2000 Program Direction
Climate Change Program Development			
Advisory Committee Monitors and directs implementation of the Action Plan Oversees education and awareness campaigns	<ul style="list-style-type: none"> - produce a Third Annual Progress Report - decide on feasibility of implementing remaining Action Plan elements in the near term - decide on feasibility of implementing, or assisting in the implementation of direct action programs in the community 	in 1998/99 the Advisory Committee was inactive due to staff vacancies at the City of Ottawa. Third Annual Progress Report deferred to 2000	Implementation Team developed Third Annual Progress Report. Advisory members to be contacted and their input solicited to establish the strategic direction for an enhanced and expanded community plan.
Implementation Team Provides support and acts as the technical resource for the Advisory Committee and Action Plan Work Groups Oversees the day-to-day operations of the active Action Plan elements	<ul style="list-style-type: none"> - investigate the feasibility/costs/etc. of implementing the remaining Action Plan elements in the near term - investigate the feasibility/costs/etc. of implementing, or assisting in the implementation of direct action programs in the community 	Inactive until spring 1999 Development of residential outreach marketing plan to promote energy efficiency (see Section 4.0) initiated commercial /institutional energy, GHG reduction program (see Section 5.0)	Full program review of active and inactive program elements. Implementation of community residential outreach through EnviroCentre and other partners Implement the Commercial Building Efficiency Partnership (CBEP)
Greenhouse Gas Monitoring Continued enhancement of quantitative analysis and emissions calculations.	<ul style="list-style-type: none"> - create 1997 inventory - improve model and data collection 	1998 EMB assisted in the development of a software monitoring tool that is now used by all PCP member cities Completed 1998 corporate emissions inventory and progress report	Develop inventory of GHG emissions for New City of Ottawa* Work with the PCP program to enhance reporting protocols, improve/ streamline monitoring process

Work Group/ Program Area Objectives	1998 Strategic Plan	1998/99 Progress	Year 2000 Program Direction
Commercial/ Institutional Sector			
<p>CO₂ Corporate Challenge Created to provide support to City organisations who commit to reducing their own corporate emissions.</p> <p>Aims to provide a comprehensive program of services and tools to assist partner organisations</p>	<ul style="list-style-type: none"> - continue to support and work with participants - monitor effects/successes - continue to look for new profile raising opportunities - raise public profile of participants - create new participation model - create Workbook 	<p>Status: Inactive</p> <p>Implementation Team's involvement with Corporate Challenge (CC) members was minimal. However, several CC members continue to implement progressive environmental programs such as: Mountain Equipment Co-op which has announced the construction of a new facility to be designed to the highest energy efficiency standards (C2000)</p>	<p>Corporate Challenge partners to be contacted and interviewed to determine effectiveness of the existing program, identify program enhancements or alternatives.</p> <p>Report to review the progress of founding partners and make recommendations for the development of an enhanced corporate challenge or alternatives</p>
<p>Transportation Demand Management (TDM) Established to help employers create effective programs to encourage alternatives to single occupancy vehicle commuting.</p>	<ul style="list-style-type: none"> - continue development of Toolkit - investigate employer-based payment programs for transit passes - assist Corporate Challenge members with their TDM programs 	<p>TDM Toolkit developed by EMB and delivered to Corporate Challenge participants.</p> <p>Corporate Challenge member, the University of Ottawa will be the first employer in Ottawa to provide OTranspo's payroll deduction transportation pass (<i>Ecopass</i>) service to its employees.</p>	<p>Follow- up with Corporate Challenge partners to determine uptake of TDM toolkit</p> <p>Report on success, lessons learned</p>
<p>Energy Service Companies (ESCOs) Helps clients avoid high up-front costs-often a barrier to increased efficiency.</p> <p>ESCOs retrofit a facility at no cost to the owner and are repaid through energy savings achieved</p> <p>NEW PROGRAM Commercial Building Efficiency Partnership (CBEP) Targets main source of corporate CO₂ emissions designed to promote energy efficient building retrofits</p>	<ul style="list-style-type: none"> - continue ad-hoc implementation of this initiative as opportunities arise 	<p>Consultation with local ESCOs, utilities, and major stakeholders to develop a community-wide Institutional / Commercial Building retrofit program.</p> <p>In 1999, the City developed feasibility study which identified opportunities for energy efficiency retrofits of commercial/institutional buildings sector. Resulted in proposal for a Commercial Building Efficiency Partnership (CBEP)</p>	<p>Design marketing materials and program elements of Institutional / Commercial Building retrofit program.</p> <p>Launch of Institutional / Commercial Building retrofit program.</p> <p>Launch of the CBEP, led by City of Ottawa, Environmental Management Branch (EMB). Other partners include: local utilities; Energy Service Companies, Ottawa Building Mangers Association.</p>

Work Group/ Program Area Objectives	1998 Strategic Plan	1998/99 Progress	Year 2000 Program Direction
Financing Raise awareness and educate financial institutions on the favourable economics of energy efficiency to encourage more favourable lending rates.	<ul style="list-style-type: none"> - investigate the feasibility of implementing financing initiative in the near term 	retrofit financing options explored, including ESCos and utility on-bill financing. Support for the development of a Federal retrofit financing fund and eligibility criteria.	Announcement of Federal retrofit financing package expected. Work with FCM to ensure eligibility for retrofit funding for the new City of Ottawa.
NEW PROGRAM District Energy Provides an alternative approach to space heating/ cooling which promotes energy efficiency, local environmental and economic benefits		Initiated in November, 1999. Development of pilot project to use energy produced at the Domtar (EB Eddy) processing plant to heat and cool downtown buildings	Development of business plan for the pilot project. Partners include: Natural Resources Canada (lead agency), the Region, Ottawa Hydro, National Capital Commission, Enbridge, Cities of Hull and Ottawa.
Education and Awareness			
Ottawa Green Information Line (OGIL) Developed to provide useful, concise information on energy efficiency and the environment to the community	<ul style="list-style-type: none"> - monitor/review system - monitor/review marketing/ advertizing plan - investigate other venues for the OGIL - created telephone menu system - created advertizing/ marketing plan - launched OGIL 	Active OGIL installed on the City of Ottawa Meridian phone system program uptake has been very low with a total of 63 callers obtaining menu information in 1999.	OGIL system to be suspended. Explore the feasibility of using an interactive web site link. Such as existing EnviroCentre website to disseminate information.
Transportation Awareness Aimed at raising awareness about the relationship between transportation and environmental problems.	<ul style="list-style-type: none"> - expand awareness campaign - organize free security registration for bikes - involve City Councillors - organize non-polluting commuter race 	May- June 1999 - Successful Community Commuter Challenge and Clean Air Day Canada Campaigns National Capital commuters win the Canadian Commuter Challenge by having the highest national participation and successfully challenging Calgary, last year's winner	Build on the success of 1999 Commuter Challenge to enhance participation and increase awareness within the community Continue to build partnerships with other levels of government, NGOs and private sector to enhance community awareness and action.

Work Group/ Program Area Objectives	1998 Strategic Plan	1998/99 Progress	Year 2000 Program Direction
Residential Sector			
<p>Home/Commercial Energy Rating System (HERS)</p> <p>HERS are intended to increase awareness of the value of energy efficiency to provide further incentive for building retrofit</p>	<p>- investigate feasibility of implementation of the initiative in the near term</p>	<p>Launch of <i>EnviroCentre</i>, a local NGO delivering <i>Energuide for Houses</i>, the new Federal home energy rating system.</p> <p>Development of EnviroCentre's 5-year business plan for local <i>Energuide</i> delivery</p>	<p>Increase uptake of <i>Energuide for Houses</i> and Increase capacity for EnviroCentre to deliver the service through:</p> <ul style="list-style-type: none"> • targeted marketing • continued in-kind and monetary support • business plan review • Board participation
<p>Contractor Certification</p> <p>Envisaged as a tool to build confidence of reliability of energy efficiency installation and service</p>	<p>- investigate feasibility of implementation of the initiative in the near term</p>	<p>guidelines for residential contractor relationships developed by EnviroCentre.</p>	<p>Use of existing professional association such as the Canadian Association of Energy Service Companies (CAESCO) to pre-screen contractors for Institutional / Commercial Building Efficiency program</p>

* This Task is being undertaken jointly by the City of Ottawa and the Region of Ottawa-Carleton

4.0 Overview of Year 2000 Program Activities

4.1 Residential Buildings Sector

In 1995, the residential sector was responsible for 12% of Canada's total GHG emissions, both directly and indirectly. Direct emissions result from energy use in the home (ex: furnace) and indirect emissions result from the generation of electricity to run appliances and amenities in the home¹. Natural Resources Canada (NRCan) data indicates that energy use in the average home is increasing due to factors such as:

- increased use of electrical appliances in the home;
- increased lighting (ex: landscaping);
- increased window area;
- an increase in the average size of the Canadian home.

Since the residential sector in the City of Ottawa is responsible for almost 30% of all emissions, efforts to reduce energy in this sector are key to the success of the City's climate change program. In 1999 the City helped to establish a local program, EnviroCentre, developed to achieve emissions reductions in the residential housing sector.

4.2 Forging Partnerships: Residential Outreach through EnviroCentre

The City of Ottawa has partnered with EnviroCentre to deliver residential outreach and reduce emissions in the residential sector. EnviroCentre is an independent not-for-profit business, supported by corporate and government partners such as the City of Ottawa.

The cornerstone of EnviroCentre's service is *Energide for Houses (EGH)*, the residential energy assessment tool designed by NRCan. EGH is emerging as the industry standard for home energy rating tools, and NRCan currently has a subsidy in place to develop a market for this service. EnviroCentre has the only license to deliver *Energide for Houses* in Eastern Ontario. During the year 2000, EGH will be marketed to the citizens across the region as a key component of the City's residential GHG emission reduction program.

4.3 EnerGuide for Houses (EGH)

EGH is a program developed by NRCan where a qualified evaluator visits a home and assesses its energy related features including annual energy requirements, and provides an energy efficiency rating, much like the EnerGuide rating seen on appliances. The house is evaluated as a "system", which recognizes that if one variable changes, other factors will be affected. An EGH evaluator will:

- depressurise the house to discover where leaks and drafts originate;

- generate an energy efficiency rating for the house, detailing energy consumption and heat loss;
- offer independent advice on how to make the home more energy efficient.

EnviroCentre's free follow-up assessment service will measure the energy reductions achieved once clients have implemented the recommended measures. This service will help the City track the effectiveness of the EGH program by providing examples of measurable GHG emissions reductions and demonstrated results.

4.4 The Benefit of Partnerships

Working through a partner such as EnviroCentre is by far the most cost-effective way for the City to penetrate the residential sector. As a *business* incorporated as a *not-for-profit*, EnviroCentre offers unique advantages, including:

- maximum flexibility in staffing and other service elements to improve margins (unlike municipal governments or unionized utilities);
- the ability to build retail capacity to ensure financial stability (unlike municipal governments or strict not-for-profit organizations);
- providing a community profile and not-for-profit *EGH* rates for corporate and government partners;
- the ability to secure grants for up-front development costs of building capacity and marketing to clients (unlike utilities, contractors and other private sector interests).

In 1999, the City contributed \$13,500 to EnviroCentre in addition to \$30,000 of in-kind costs. This seed money was used to attract over \$90,000 from corporate and government partners and to generate \$13,000 in retail sales. In 2000, the City of Ottawa's Environmental Management Branch is budgeting \$10,000 for EnviroCentre, and dedicating a staff member to promote *EnerGuide for Houses* within the boundaries of the Region of Ottawa-Carleton. Other partners have committed over \$100,000 for EnviroCentre in 2000.

4.5 Marketing Strategy for 2000: EGH

Although *EnerGuide for Houses* is identified as an important component of the City's climate change strategy, this service will be marketed as a home comfort/ air quality assessment, a renovation guide and a contractor quality assurance support. The fact that GHG emissions will be curbed as a result of home improvements is usually incidental to the home owner and thus the climate change message will be presented as a co-benefit to purchasing this program.

Marketing of the EGH service will occur through different media throughout the year 2000 including:

- newspaper articles planned for both the fall/winter season and the spring renovation season;
- community newspaper articles targeting older Ottawa neighbourhoods. Older homes typically have drafts, old inefficient furnaces and poor insulation, and are prime candidates for an EGH;
- flyer drops in target areas will reinforce the EGH message found in the papers while reminding people that they do not have to live in a drafty, uncomfortable house;
- information evenings to explain the benefit of an EGH visit during spring renovation seminars at local renovation stores;
- employee campaigns at the City, the RMO and other corporations will promote EGH visits by employers to their employees at work;
- a newly designed flyer will be included in mass mailings such as in utility bills, City permit applications, Regional permit applications and contractor customer mailing lists;
- The City will develop a working relationship with contractors, builders, co-ops and condominium boards to market bulk EGH sales.

4.6 Potential Impact and Program Summary: EnerGuide for Houses

In 1999, EnviroCentre provided 360 home visits, including 51 comprehensive EnerGuide for Houses

assessments. If the recommendations included in the Home Energy Reports are implemented it is estimated that these householders could save an average of \$450 per year, and reduce CO₂ emissions by 200 tonnes per year. Table 3 summarizes program activities and illustrates the potential impact of EGH on local GHG emissions and the economy.

Table 3: Program Summary- EnviroCentre Residential Outreach Program

Program Element	Impact
total potential for CO ₂ reductions ¹	11,000 to 28,000 tonnes eCO ₂ per year
program target for 2000 (0.001% of total)	100 tonnes
total potential economic impact ²	\$32,000,000 to \$80,000,000*
program revenue target for 2000	\$30,000
program design	1998-99
program implementation	1999 - 2000 and beyond

* \$40,000,000 in achievable utility bill savings, \$280,000,000 invested in energy efficient retrofits. This level of local economic activity would create over 4,500 person-years of employment.

1 100% program uptake would result in approximately 112,130 tonnes of eCO₂ saved per year. This figure assumes an uptake of 10%-25%

2 100% program uptake would result in potential local economic impacts of \$320,000,000. This figure assumes program uptake of 10% to 25%.

5.0 Commercial/ Institutional Buildings

5.1 Commercial Building Efficiency Partnership (CBEP)

In 1997, The City of Ottawa developed the *CO₂ Corporate Challenge* to reduce CO₂ emissions within the private sector. This was a broad-based program, involving corporate action plans, transportation initiatives, employee programs and audits to buildings. In 1999, the Environmental Management Branch began to narrow the focus of the *Corporate Challenge* to address the specific needs of building owners. Since the main source of corporate emissions is energy use in buildings, the establishment of the *Commercial Building Efficiency Partnership* (CBEP), modeled after the City of Toronto's *Better Buildings Partnership* (BBP), is the first step in a *Corporate Challenge* redesign.

The *Commercial Building Efficiency Partnership* (CBEP) is designed to create jobs, to make Ottawa's infrastructure more competitive, and to reduce CO₂ emissions from large commercial and institutional buildings.² Local utilities, Energy Service Companies, and Ottawa's Building Owners and Managers Association are integral partners in the program. The CBEP will promote energy retrofits by:

- putting building managers in touch with pre-screened energy service companies;
- providing technical assistance through utility partners;

- providing template contracts;
- overseeing a loan securitization fund to be established with federal and utility dollars;
- promoting the program among Ottawa's building owners and managers;
- providing awards and promotional coverage for participating buildings.

In 1999 the City contributed \$25,000 to complete a technical study of building emissions in Ottawa. \$10,000 has been budgeted to implement the CBEP in 2000. The estimated impact of the program is outlined in Table 4.

Table 4: Program Summary: Commercial Building Efficiency Partnership (CBEP)

Program Element	Impact
total potential for CO ₂ reductions ¹	16,900 to 42,250 tonnes e CO ₂ per year
program target for 2000 (1% of total potential)	1,700 tonnes
total potential economic impact ²	\$53,600,000 to 134,000,000*
program target for 2000 (1% of total potential)	\$6,000,000
program design	1999
program implementation	pilot program in 2000

* \$67,000,000 in achievable utility bill savings, \$469,000,000 invested in energy efficient retrofits. This level of local economic activity would create more than 8,000 person-years of employment.

1 100% program uptake could achieve a reduction of 169,000 tonnes of eCO₂ per year. A 10% to 25% range is reasonable to expect.

2 100% program uptake could provide economic benefits of \$536,000,000. This figure assumes uptake in 10% to 25% range.

6.0 District Energy System

District energy provides an energy efficient approach to space heating and cooling requirements in buildings. District energy uses central energy plants to meet space heating, domestic hot water and cooling needs for buildings and other energy users. These combined heat and power plants replace individual, building based furnaces, boilers, chillers and coolers by distributing thermal steam energy from central plants to individual buildings while simultaneously generating electricity for local sale and distribution.

In November, 1999, the City was approached by Natural Resources Canada (NRCan) to participate in the development of a District Energy System in Ottawa. Other stakeholders

invited to participate include: the Region, the National Capital Commission, Public Works and Government Services, Ottawa Hydro, Enbridge Consumers Gas and the City of Hull.

There is a tremendous opportunity for public/ private partnership, and investors will fully recover costs through the sale and transmission of steam. In addition to huge environmental benefits, District Energy Systems retain capital in the local economy and insulate the community against price fluctuations in a deregulated utility market.

The goal is to complete a preliminary business plan for the project by the end of 2000. The Environmental Management Branch has budgeted \$10,000 for this project in 2000.

Table 5: Project Summary (Estimates): District Energy

Program Element	Impact
estimated potential for CO ₂ reductions	over 100,000 tonnes per year
estimated cost of project	less than \$30 million*
project design	1999 - 2002
project implementation	2003 and beyond

* costs may be divided between municipal government, federal government and private sector investors. Investment costs will be recuperated through the sale and transmission of steam.

7.0 Community Education and Awareness

7.1 The Commuter Challenge

The City of Ottawa has been actively involved in promoting environmental awareness and climate change outreach in the National Capital area. Two featured events of June 1999 were the Commuter Challenge and Clean Air Day Canada. Clean Air Day Canada's theme of "Community Action on Clean Air and Climate Change" provided an excellent forum for promoting the need to reduce greenhouse gas emissions in our community.

The largest contributor to climate change locally is transportation. The Commuter Challenge is a week long event designed to promote alternative transportation and reduce single occupancy vehicle use for commuting. In 1999, the City of Ottawa partnered with the Federal Government, the Region and the environmental NGO *Autofree Ottawa* to promote the Commuter Challenge in the National Capital Region.

City of Ottawa climate change staff supported the Commuter Challenge through the following activities:

- distributing 3000 posters, information packages to local municipalities, corporations,

high schools and individuals;

- soliciting over \$3,000.00 in prizes and incentives for participation;
- issuing a challenge from Ottawa Mayor Jim Watson to Calgary Mayor Al Duer, the 1998 Commuter Challenge winner;
- promoting the Commuter Challenge locally through press releases and follow-up.

The efforts of the Commuter Challenge partners were rewarded when, on Tuesday, June 8th, 1999 it was confirmed that the National Capital Region had defeated Calgary in the National Commuter Challenge event. In total 6,248 participants had avoided emitting 147 tonnes of local air pollutants- a three fold increase from last year.

In 2000, the Climate Change team will build on the success of last year's Commuter Challenge. Partnerships are once again established and the community is well positioned to expand on the achievements of last year's event and continue to enhance citizen awareness of the link between transportation, local air quality, and global climate change. The federal government has provided \$15,000 to the Environmental Management Branch to support this local program which will also help to achieve federal environmental and health goals.

7.2 Ottawa Green Information Line (OGIL)

The Ottawa Green Information Line (OGIL) is a menu driven telephone system developed to provide a central location for information on energy efficiency for City residents. The system provides information on a wide variety of topics such as new home construction, renovation, the home office, heating, cooling, lighting, transportation and waste. The target group for this service is the general public, with an emphasis on residents who will be purchasing or building a new home, or renovating an existing home.

In the Second Annual Progress Report, the OGIL is identified as a major component of the Community Climate Change Action Plan's Awareness Campaign. It was anticipated that by providing citizens with useful, concise information at the right time, lost opportunities to implement energy efficiency measures would be avoided and potential GHG emissions reductions could be maximized. The OGIL, which is hooked into the City's Meridian phone system, has been in place since September, 1997. Since its launch, the OGIL has been marketed using brochures, refrigerator magnets and business cards.

7.2.1 Impact of the OGIL

When the OGIL was established, a monitoring system was put in place to record the number of phone calls and the number of information trees visited by each caller. Results demonstrate that the OGIL has not achieved high uptake levels. For example, in 1999 there were a total of 160 calls to the line, and of those, only 62 individuals progressed beyond the initial greeting. Many of the information items provided by the OGIL received no visits.

Clearly, this program is not reaching a sufficient number of residents to produce a significant increase in citizen awareness of energy efficiency and climate change. As a result, measurable GHG emissions reductions are unlikely to be achieved. It is recommended that this program be suspended in 2000. Alternative information dissemination strategies will be considered in 2000 including the feasibility of using an interactive web link to enhance awareness. Existing sites, such as EnviroCentre's website may provide an excellent mechanism to disseminate the City's climate change message. In addition, the federal government will be developing a national climate change awareness campaign which will work with municipalities to include program-specific and locally relevant messages. This will be an excellent forum to enhance the City's local outreach initiatives.

8.0 Conclusions

This report summarises the City's progress towards reducing emissions and promoting energy efficiency within the community. Results indicate that the City of Ottawa has reduced GHG emissions within the community by 5% from 1990 levels. This runs counter to national trends and illustrates the important role that municipal action can play in climate change mitigation.

The City of Ottawa remains a recognised leader in municipal climate change action. The Task force on the Atmosphere Action Plan was one of the first community climate change action plans in Canada. Since its development in 1995, some programs have been less active and new programs have evolved which will provide measurable energy and emissions savings in the community. The City continues to recognise the value of climate change action which supports other community goals such as job creation, air quality and health improvements, and traffic issues.

In 2001, the new City of Ottawa Council will need to recommit to local climate change action through the PCP program. This year provides an excellent opportunity to reevaluate programs initiated in 1995 and implement new or improved initiatives to help continue the City's progress towards attaining the climate change goal. The climate change team will continue to explore opportunities to work with other levels of government and the private sector to support local action.



March 31, 2000 (2:59p)

Edward Robinson
Commissioner of Urban Planning and Public
Works

MS:mas

Contact: Mary Anne Strong - 244-5300 ext. 1-3819
Kimberley Leach - 244-5300 ext. 1-3890

Financial Comment

N/A



March 31, 2000 (2:42p)

for Mona Monkman
City Treasurer

CP:ari

Footnotes:

1. National Climate Change Process. Buildings Table Options Paper (Nov. 15, 1999)
2. During a 2-year pilot phase, Toronto's BBP implemented \$60 million worth of projects in Toronto, created over 3,000 person-years of employment, and reduced annual CO₂ emissions by 60,000 tonnes. With the program now fully launched, their goal is to retrofit every building in Toronto in the next 15 years - generating approximately \$3 billion in local economic activity and achieving annual CO₂ reductions of around 4 million tonnes. Toronto has invested 5 years in the development of this program, and will be providing resources in 2000 to the City of Ottawa to establish the local program.

References:

Government of Canada. Canada's Emissions Outlook: an Update. National Climate Change Process Analysis and Modelling Group. December, 1999. Pp.



March 28, 2000

ACS2000-PW-ASM-0001
(File: EW-555-2-2)

Department of Urban Planning and Public
Works

Ward/Quartier
City Wide

- Community Services and Operations
Committee / Comité des services
communautaires et des opérations
- City Council / Conseil municipal

Action/Exécution

2. Hiring of Dump Trucks

Louage de Camions à Benne

Recommendation

It is recommended that the hourly rates for snow haulage remain the same, but to reflect the impact of the current fuel situation, a one time premium payment of \$2.05 per hour, be made to only those truckers, who worked during the period of February 9, 2000 to March 31, 2000.

March 29, 2000 (3:13p)

Edward Robinson
Commissioner of Urban Planning and Public
Works

March 30, 2000 (3:17p)

Approved by
John S. Burke
Chief Administrative Officer

JG:jg

Contact: James Guilbault - 244-5300 ext. 1-2048
James Mouland - 244-5300 ext. 1-2047

Financial Comment

Funds in the estimated amount of \$20,000. are available from within the Department of Urban Planning and Public Works approved 2000 Operating budget for Roadway Maintenance-Winter, for this purpose.

March 29, 2000 (2:51p)

for Mona Monkman
City Treasurer

CP:cds

Executive Report

Reasons Behind Recommendation

In November, 1998, City staff negotiated a 6% increase in the hourly rate for the haulage of snow, for a three year period, with the Greater Ottawa Truckers Association. In their letter of acceptance, the Association identified, “that should any unforeseen circumstances occur with expenditures related to the industry, this agreement can be revisited, regardless of the three year term”.

At the request of the Association, given the recent dramatic rise in the price of diesel fuel, City staff agreed to review the increase in costs. Comparisons were made based on City price increases for diesel since October, 1998, and data provided from the Truckers Association, for the same period. An average price increase of \$2.30 was calculated based on both sets of data. This price was then reduced by \$.25, to allow for the portion related to fuel in the 6% increase, provided in November, 1998.

Both the Greater Ottawa Truckers Association, and City staff agree that the \$2.05, accurately reflects the extra cost related to fuel for snow haulage.

Prior to the start of the 2000/2001 winter season, the fuel price situation will be reviewed to determine if any further price adjustments are required.

Consultation

The Regional Municipality of Ottawa Carleton has received a copy of this report.

This agreement was reached following negotiations between City staff and representatives of the Greater Ottawa Truckers Association. The Association’s executive agrees with the recommendation.

Disposition

The Department of Urban Planning and Public Works to process a retroactive one time premium payment of \$2.05 per hour for snow haulage, to be made only those truckers who worked during the period from February 9, 2000 to March 31, 2000, because of the substantial increase in the price of diesel fuel.